

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Joseph C. KAWAN

Group Art Unit: 3694

Serial No.: 09/238,995

Examiner: Felten, Daniel S.

Filed: January 28, 1999

**For: METHOD AND SYSTEM OF CONTACTLESS INTERFACING FOR SMART  
CARD BANKING****FILED ELECTRONICALLY****APPEAL BRIEF**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief under 37 C.F.R. § 41.37 in connection with the decision of the Examiner mailed on October 31, 2007, setting a three month period for response to expire on January 31, 2008, absent an extension. A Response After Final Office Action and a Notice of Appeal were filed on January 30, 2008, setting the period for filing an Appeal Brief to expire on March 30, 2008, absent an extension. A one-month extension of time is submitted herewith to extend the period for filing the Appeal Brief up to and including April 30, 2008.

This Appeal Brief fully complies with all provisions of 37 CFR 41.37(c) and each of the topics required by § 41.37 is presented herewith and is labeled appropriately. It is not believed that any additional fees are due, but if so, please charge any deficiency to Deposit Account No. 50-4402.

**(1) Real Party In Interest**

The real party in interest is Citicorp Development Center, Inc.

**(2) Related Appeals And Interferences**

Applicants previously appealed a final rejection and filed an Appeal Brief on October 3, 2003, whereupon on September 1, 2006 in lieu of a Reply Brief the Examiner withdrew the finality of the rejection and issued a non-final office action. There are no other appeals or interferences related to this case.

**(3) Status of Claims**

Claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 are pending and all have been rejected.

Claims 6, 7, 9, 18-21, 23-26, 28-32, 34-38, 40, 41, 51-54, 59-62, 67, 68, and 75-78 have been canceled.

No claims have been allowed.

No claims have been withdrawn.

Claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 are hereby appealed.

**(4) Status of Amendments**

There are no amendments after final rejection.

**(5) Summary of Claimed Subject Matter**

Independent claim 1 proposes a method of contactless interfacing for a financial transaction smart card that involves allowing a user to establish a physical contact bi-directional communication interface between a financial transaction smart card and a hand-held computing device for accessing a financial transaction smart card application on a microcomputer of the financial transaction smart card (Application 3:3-7; 8:24-9:12; and Fig. 7), allowing the user to

enter identifying information and transaction information on the hand-held computing device (Application 8:24-9:12 and Fig. 7), and allowing the user to initiate a contactless bi-directional communication interface via the hand-held computing device as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and a self-service transaction terminal of an on-line system of a financial institution (Application 2:13-3:2; 3:7-13; 9:13-21; and Fig. 8). In addition, claim 1 proposes verifying the financial transaction smart card by the on-line system based at least in part on the identifying information received by the on-line system via the contactless communication interface between the hand-held computing device and the self-service transaction terminal (Application 2:17-19; 3:14-22; 9:13-21; and Fig. 8) and communicating the transaction information entered by the user on the hand-held computing device to the self-service transaction terminal of the on-line system via the contactless communication interface (Application 2:17-19; 3:14-22; 9:13-21 and Fig. 8).

Independent claim 63 proposes a contactless interface system for a financial transaction smart card that includes, for example, a self-service transaction terminal of an on-line system of a financial institution (Application 2:23-25; 3:14-16; 9:18-21; and Figs. 1 and 8) and a hand-held computing device capable of establishing a physical contact bi-directional communication interface with the financial transaction smart card for accessing a financial transaction smart card application on a microcomputer of the financial transaction smart card (Application 3:3-7; 5:5-9; 8:24-9:12; and Figs. 1-7). Claim 63 proposes further that the hand-held computing device has an input device for receiving identifying information and transaction information entered by a user (Application 5:9-7:8; 8:24-9:12 and Fig. 1-7) and is capable of initiating a contactless bi-directional communication interface as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and the self-service transaction terminal of the on-line system via the hand-held computing device (Application 2:13-3:2; 3:7-13; 5:9-7:8; 9:13-21; and Figs. 1-8). Additionally, claim 63 proposes that the on-line system is capable of verifying the financial transaction smart card via identification information received by the on-line system via the contactless communication interface between the hand-held computing device and the self-service transaction terminal (Application 2:17-19; 3:14-22; 5:12-14; 9:13-21; and Figs. 1 and 8) and that the hand-held computing device is capable of communicating the transaction information to the on-line system via the contactless

communication interface between the hand-held computing device and the self-service transaction terminal (Application 2:17-19; 3:14-22; 5:9-7:8; 9:13-21 and Figs. 1-8).

**(6) Grounds of Rejection to be Reviewed on Appeal**

Claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,221,838 (hereinafter Gutman) in view of U.S. Patent No. 5,748,737 (hereinafter Daggar) and U.S. Patent No. 5,563,393 (hereinafter Coutts).

**(7) Argument**

**The Rejection of Claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 Under 35 U.S.C. 103(a) Over Gutman, Daggar and Coutts is Improper**

Claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 stand rejected as obvious over Gutman, Daggar, and Coutts under 35 U.S.C. § 103(a).

The proposed modification of Gutman in view of Daggar and Coutts lacks one or more limitations recited in each of independent claims 1 and 63, and there is inadequate articulated reasoning with rational underpinning to support the Examiner's legal conclusion of obviousness.

- As acknowledged by the examiner, Gutman fails to teach or suggest a method of contactless interfacing for a financial transaction smart card, in which a user is allowed to establish a physical contact bi-directional communication interface between the financial transaction smart card and a hand-held computing device for accessing a financial transaction smart card application on a microcomputer of the financial transaction smart card, as recited in independent claim 1 and similarly in independent claim 63. Yet the examiner asserts that the financial card of Gutman provides bi-directional communication. With respect, the examiner has failed to grasp the difference between a magnetic-stripe card and a financial transaction smart card. A magnetic-stripe card is incapable of communication. Rather, it stores information. Other devices may read and write information to the

magnetic-stripe card, but the magnetic-stripe card takes no active role in communicating the information. In other words, the magnetic-stripe card never engages with any other device except as a passive participant. By contrast, a financial transaction smart card actively participates in communication with other devices, including a terminal at a financial institution. Whereas a magnetic-stripe card only stores information, a financial transaction smart card stores *and actively transmits* information.

- Nor does Gutman teach or suggest a method of contactless interfacing for a financial transaction smart card in which the user is allowed to initiate a contactless bi-directional communication interface via the hand-held computing device as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and a self-service transaction terminal of an on-line system of a financial institution, as recited in claim 1 and similarly in claim 63. A financial transaction smart card is capable of bi-directional communication, using a hand-held computing device as a conduit. In other words, the hand-held computing device opens a channel and allows the financial transaction smart card itself to communicate information through the channel. Gutman, however, discloses a hand-held computing device that does not act as a conduit—instead, the hand-held computing device of Gutman first must gather information from the passive magnetic-stripe card. At that point, the hand-held computing device of Gutman communicates information. At no point does the magnetic-stripe card itself engage in any communication.
- Daggar fails to remedy the deficiencies of Gutman. Daggar does not teach a method of contactless interfacing for a financial transaction smart card in which the user is allowed to initiate a contactless bi-directional communication interface via the hand-held computing device as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and a self-service transaction terminal of an on-line system of a financial institution, as recited in claim 1 and similarly in claim 63. Instead, Daggar teaches downloading and storing smart card applications to the hand-held computing device and thereafter choosing one of the downloaded applications

(referred to by Daggar as “digital cards”) on the hand-held device to perform a transaction using only the hand-held device and eliminating any need for a smart card, and/or in turn further downloading the “digital cards” stored on the hand-held device to a “generic multimedia card,” which can then be carried around and used without the hand-held device. (See, e.g., Daggar 12:1-8; 13:13-27; and 18:45-51). Accordingly, the hand-held device of Daggar merely downloads the smart card applications, and the smart card does not communicate bi-directionally with a terminal of a financial institution. Moreover, because the hand-held computing device in Daggar merely reads and writes to smart cards, Daggar clearly does not disclose the use of a hand-held computing device as a conduit through which a financial transaction smart card engages in bi-directional communication.

- Likewise, Coutts fails to remedy the deficiencies of Gutman and Daggar. Instead of a method of contactless interfacing for a financial transaction smart card in which the user is allowed to initiate a contactless bi-directional communication interface via the hand-held computing device as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and a self-service transaction terminal of an on-line system of a financial institution, as recited in claims 1 and 63, Coutts teaches a hand-held device (i.e., a notepad personal computer) that has a RF modem (i.e., a PC card, formerly known as a PCMCIA card) by which the hand-held device communicates directly with a terminal (i.e., an ATM) to diagnose technical problems. (See, e.g., Coutts 2:21-3:13). Respectfully, the examiner appears to misunderstand the difference between a financial transaction smart card and a PCMCIA card. As Coutts explains, a PCMCIA card is simply “an integrated circuit card, configured to operate as a modem.” (see Coutts 2:58-61). A PCMCIA card does not have any ability to store financial information or financial transaction smart card applications. By contrast, a financial transaction smart card can, for example, contain a microcomputer with memory to set up and securely store data. (See Application 5:5-7.) The examiner argues that it would have been obvious to modify by substituting the PCMCIA card. As the foregoing

remarks show, however, a PCMCIA card bears no relation to a financial transaction smart card and performs wholly different functions. Accordingly, the combination of a PCMCIA card with Gutman would *not* have the effect of allowing contactless bi-directional communication between a financial transaction smart card and a terminal of a financial institution.

- The examiner faulted Applicant for “attacking references individually.” With respect, Applicant has demonstrated Gutman’s deficiencies (with which the examiner has agreed). Moreover, Applicant has demonstrated that Daggar and/or Coutts remedies Gutman’s deficiencies. Accordingly, Applicant has not merely attacked references individually; rather, Applicant has shown that the cited references, separately or in combination, do not recite the limitations present in independent claims 1 and 63.

The Examiner's reasoning in rejecting independent claims 1 and 63 appears to be that, having first thought of using electronic wallet technology to allow existing infrastructures to accept new digital card transactions, provide digital card storage, reduce fraud, and make secure financial transactions, one of ordinary skill would have seen the advantages in a developing a system that involves allowing a user to (a) establish a physical contact bi-directional communication interface between a financial transaction smart card and a hand-held computing device for accessing a financial transaction smart card application on a microcomputer of the financial transaction smart card, (b) enter identifying information and transaction information on the hand-held computing device, and (c) initiate a contactless bi-directional communication interface via the hand-held computing device as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and a self-service transaction terminal of an on-line system of a financial institution as recited in independent claim 1 and similarly in independent claim 63, as concluded by the Examiner. But the Examiner has not even shown how this follows, and has more critically failed to show that one of ordinary skill would have considered developing such a system to begin with.

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the

background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (C.A.Fed.2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

*KSR Int'l v. Teleflex Inc.*, 127 S.Ct. 1727 at 1740-41 (2007). The Examiner's reasoning that the development of such a system "would be an obvious expedient" is conclusory in that it begins with the claim limitation and from that infers a generic benefit in hindsight. This is not a rational underpinning that shows a connection by articulated reasoning of what those of ordinary skill knew, leading to the claim limitation at issue.

Consequently, Gutman and/or Daggar and/or Coutts, separately or in combination with one another, do not recite the required combination of limitations of independent claims 1 and 63. Because the cited references, either alone or in combination, do not teach the limitations of independent claims 1 and 63, the examiner has failed to establish the required *prima facie* case of unpatentability. See *In re Royka*, 490 F.2d 981, 985 (CCPA 1974) (holding that a *prima facie* case of obviousness requires the references to teach all of the limitations of the rejected claim); see also MPEP § 2143.03.

The Examiner has failed to establish the required *prima facie* case of unpatentability for independent claims 1 and/or 63 and similarly has failed to establish a *prima facie* case of unpatentability for claims 2-5, 8, 10-17, 22, 27, 33, 39, 42-50, and 55-58 that depend on claim 1 and claims 64-66, 69-74, and 79-81 that depend on claim 63, and which recite further specific elements that have no reasonable correspondence with the references.



**(8) Conclusion**

For at least the reasons given above, the rejection of claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 is improper. Applicants respectfully request the final rejection by the Examiner be reversed and claims 1-5, 8, 10-17, 22, 27, 33, 39, 42-50, 55-58, 63-66, 69-74, and 79-81 be allowed.

Respectfully submitted,

Date: April 24, 2008

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**(9) Claims Appendix**

1. A method of contactless interfacing for a financial transaction smart card, comprising:

allowing a user to establish a physical contact bi-directional communication interface between a financial transaction smart card and a hand-held computing device for accessing a financial transaction smart card application on a microcomputer of the financial transaction smart card;

allowing the user to enter identifying information and transaction information on the hand-held computing device;

allowing the user to initiate a contactless bi-directional communication interface via the hand-held computing device as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and a self-service transaction terminal of an on-line system of a financial institution;

verifying the financial transaction smart card by the on-line system based at least in part on the identifying information received by the on-line system via the contactless communication interface between the hand-held computing device and the self-service transaction terminal; and

communicating the transaction information entered by the user on the hand-held computing device to the self-service transaction terminal of the on-line system via the contactless communication interface.

2. The method of claim 1, wherein the contactless communication interface further comprises an infrared communication interface.

3. The method of claim 1, wherein the contactless communication interface further comprises a wireless communication interface.

4. The method of claim 3, wherein the wireless communication interface further comprises a radio frequency communication interface.
5. The method of claim 4, wherein the radio frequency communication interface further comprises a proximity communication interface.
8. The method of claim 1, wherein the financial institution further comprises a bank.
10. The method of claim 1, wherein allowing the user to initiate the contactless communication interface between the financial transaction smart card application and the self-service transaction terminal further comprises allowing the user to initiate the contactless communication interface through a contactless communication transceiver of the terminal.
11. The method of claim 10, wherein allowing the user to initiate the contactless communication interface between the financial transaction smart card application and the self-service transaction terminal further comprises allowing the user to initiate the contactless communication interface through an infrared transceiver of the terminal.
12. The method of claim 1, wherein the self-service transaction terminal further comprises an automated teller machine.
13. The method of claim 1, wherein the self-service transaction terminal further comprises a personal computer.
14. The method of claim 1, wherein the self-service transaction terminal further comprises a telephone.
15. The method of claim 1, wherein the self-service transaction terminal further comprises a wireless telephone.
16. The method of claim 10, wherein allowing the user to initiate the contactless communication interface between the financial transaction smart card application and the self-service transaction terminal further comprises allowing the user to initiate the contactless communication interface through a wireless transceiver of the terminal.

17. The method of claim 16, wherein the wireless transceiver further comprises a radio frequency transceiver of the terminal.

22. The method of claim 10, wherein allowing the user to initiate the contactless communication interface between the financial transaction smart card application and the self-service transaction terminal further comprises allowing the user to initiate the contactless communication interface through a proximity transceiver of the terminal.

27. The method of claim 10, wherein allowing the user to initiate the contactless communication further comprises allowing the user to initiate the contactless communication between the contactless communication transceiver of the self-service transaction terminal and a contactless communication transceiver of the hand-held computing device comprising a personal data assistant.

33. The method of claim 27, wherein the personal data assistant further comprises an electronic purse or wallet.

39. The method of claim 1, wherein verifying the financial transaction smart card further comprises verifying the financial transaction smart card by the on-line system based at least in part on the identifying information received by the on-line system via the contactless communication interface between the hand-held computing device comprising a personal data assistant and the self-service transaction terminal.

42. The method of claim 1, wherein verifying the financial transaction smart card further comprises verifying the authenticity of the financial transaction smart card.

43. The method of claim 1, wherein verifying the financial transaction smart card further comprises checking security information for the user.

44. The method of claim 43, wherein checking security information further comprises receiving security information for the user.

45. The method of claim 44, wherein receiving security information further comprises receiving a PIN number for the user.

46. The method of claim 44, wherein receiving security information further comprises receiving biometric information for the user.

47. The method of claim 44, wherein receiving security information further comprises receiving the security information on an input/output device.

48. The method of claim 47, wherein receiving the security information further comprises receiving the security information through an input/output device of the hand-held computing device comprising a personal data assistant.

49. The method of claim 48, wherein the personal data assistant comprises an electronic purse or wallet.

50. The method of claim 47, wherein receiving the security information further comprises receiving the information through the input/output device of a terminal.

55. The method of claim 1, wherein allowing the user to enter the transaction information further comprises receiving the information through an input/output device.

56. The method of claim 55, wherein receiving the information further comprises receiving the information through the input/output device of the hand-held computing device comprising a personal data assistant.

57. The method of claim 56, wherein the personal data assistant comprises an electronic purse or wallet.

58. The method of claim 55, wherein receiving the information further comprises receiving the information through the input/output device of a terminal.

63. A contactless interface system for a financial transaction smart card, comprising:  
  
a self-service transaction terminal of an on-line system of a financial institution;  
  
a hand-held computing device capable of establishing a physical contact bi-directional communication interface with the financial transaction smart card for accessing a

financial transaction smart card application on a microcomputer of the financial transaction smart card;

wherein the hand-held computing device has an input device for receiving identifying information and transaction information entered by a user;

wherein the hand-held computing device is capable of initiating a contactless bi-directional communication interface as a conduit between the financial transaction smart card application on the microcomputer of the financial transaction smart card and the self-service transaction terminal of the on-line system via the hand-held computing device;

wherein the on-line system is capable of verifying the financial transaction smart card via identification information received by the on-line system via the contactless communication interface between the hand-held computing device and the self-service transaction terminal; and

wherein the hand-held computing device is capable of communicating the transaction information to the on-line system via the contactless communication interface between the hand-held computing device and the self-service transaction terminal.

64. The system of claim 63, wherein the hand-held computing device further comprises an infrared interface communication device.

65. The system of claim 63, wherein the hand-held computing device further comprises a wireless interface communication device.

66. The system of claim 63, wherein the hand-held computing device further comprises a radio frequency interface communication device.

69. The system of claim 63, wherein the self-service transaction terminal comprises an automated teller machine.

70. The system of claim 63, wherein the self-service transaction terminal comprises a personal computer.

71. The system of claim 63, wherein the self-service transaction terminal comprises a telephone.

72. The system of claim 63, wherein the on-line system comprises a bank host on-line system.

73. The system of claim 63, wherein the hand-held computing device comprises a personal data assistant.

74. The system of claim 73, wherein the personal data assistant comprises an electronic purse or wallet.

79. The method of claim 1, wherein the accessing of the financial transaction smart card application comprises executing the financial transaction smart card application.

80. The method of claim 1, wherein the accessing of the financial transaction smart card application comprises loading the financial transaction smart card application.

81. The method of claim 80, further comprising iteratively performing:

the initiating of a contactless communication;

the verifying authorization; and

the communicating information.

**(10) Evidence Appendix**

There is no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, 1.132 and no other evidence entered by the examiner and relied on by appellant in the appeal.



**(11) Related Proceedings Appendix**

There are no other decisions rendered by a court or the Board in any other appeals or interferences related to this case.